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## Mobil Rarus™ 800 Series

Mobil Industrial, Norway

Air Compressor Lubricants

## **Product Description**

The Mobil Rarus™ 800 Series is a line of supreme performance air compressor lubricants primarily intended for the lubrication of severe duty reciprocat compressors but not recommended for air compressors used in breathing air applications. They are engineered to meet or exceed the stringent requirements major compressor manufacturers. They are formulated with design-specific synthetic base-oils and a high technology additive system that assures exceptional equi protection and reliability for compressors operating under conditions where mineral-oil based products are not meeting expectations. Mobil Rarus 800 Series pr excellent wear protection and outstanding resistance to oxidation and thermal degradation, greatly superior to mineral oils. Their unique formulation provides the to help reduce maintenance costs through minimising equipment problems and downstream deposits and carryover.

Mobil Rarus 800 Series lubricants significantly reduce the potential for fires and explosions, compared to mineral oil-based products. They exhibit a virtual abse deposit formation and higher autogenous ignition temperatures improving both performance and safety. Their exceptional water separating characteristics is problems with emulsion formation and carryover into downstream piping and equipment. They are recommended or approved by many of the leading companifacturers.

## Features and Benefits

The use of the Mobil Rarus 800 Series oils can result in cleaner compressors and lower deposits compared to conventional mineral oils, resulting in longer ruperiods between maintenance intervals. Their excellent oxidation and thermal stability safely allow extended life capability while controlling sludge and deposit forn They possess outstanding anti-wear and corrosion protection, which enhances equipment life and performance.

Features	Advantages and Potential Benefits
High Performance Synthetic Base Stocks	Significant performance capabilities relative to mineral oils Improved safety
Low Ash and Carbon Formation	Improved valve performance  Reduced deposits in discharge lines  Reduced potential for fires and explosions in discharge systems  Improved compressor performance
Outstanding Oxidation and Thermal Stability	Longer oil life Improved filter life Lower maintenance costs
High Load-carrying ability	Reduced wear of rings, cylinders, bearings and gears
Excellent Water Separability	Less carryover to downstream equipment  Reduced sludge formation in crankcases and discharge lines  Reduced blockage of coalescers  Less potential for emulsion formation
Effective Rust and Corrosion Protection	Improved protection of valves and reduced wear of rings and cylinders

# Applications

The Mobil Rarus 800 Series oils are recommended for single and multistage air compressors, but are not recommended for air compressors used in breath applications. They are particularly effective for continuous high temperature operation with discharge temperatures up to 200°C. They are suitable for reciprocation rotary type machines with the lower viscosity grades mainly used in rotary compressors. Rarus 800 Series oils are recommended for units with a history of exc

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degradation, poor valve performance or deposit formation. They are compatible with all metals used in compressor construction and with mineral oil-based lub but admixture will detract from their performance capabilities. Mobil Rarus 800 Series oils are compatible with seals made from fluorinated hydrocarbon, si fluorosilicone, polysulfide, Viton, Teflon, and high nitrile Buna N NBR (above 36% acrylonitrile) materials. Materials not recommended include low nitrile Bune 1 (below 30% acrylonitrile), natural and butyl rubbers, Neoprene, polyacrylate, styrene/butadiene and chlorosulfonated polyethylene.

Oil resistant paints are not affected by Mobil Rarus 800 Series, but lacquer, varnish, pvc and acrylic paints are not recommended.

The following types of compressor applications have shown excellent performance with the Mobil Rarus 800 Series oils:

- All types of air compressors but specifically recommended for reciprocating air compressor
- Units operating under severe conditions
- Multistage units with a history of excessive oil degradation from mineral oil-based products
- They can be used for cylinder and crankcase lubrication
- Compressor systems with critical gears and bearings
- Compressors used in stationary and mobile applications

## Properties and Specifications

Property		827	829
Grade		ISO 100	ISO 150
Copper Strip Corrosion, 3 h, 121 C, Rating, ASTM D130		1B	1B
Flash Point, Cleveland Open Cup, °C, ASTM D92		270	270
Foam, Sequence I, Stability, ml, ASTM D892		0	0
Foam, Sequence I, Tendency, ml, ASTM D892		10	10
Kinematic Viscosity @ 100 C, mm2/s, ASTM D445		10.12	13.2
Kinematic Viscosity @ 40 C, mm2/s, ASTM D445	29.5	107.5	158
Pour Point, °C, ASTM D5950		-36	-33
Rust Characteristics, Procedure A, ASTM D665		PASS	PASS
Total Acid Number, mgKOH/g, ASTM D974			0.14
Total Acid Number, mgKOH/g, ASTM D974(mod)	0.06	0.15	
Viscosity Index, ASTM D2270	127	66	70

#### Health and Safety

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ http://www.msds.exxonmobil.com/psims/psims.as All trademarks used herein are trademarks or registered trademarks of Exxon Mobil Corporation or one of its subsidiaries unless indicated otherwise.

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Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance and do not constitute a specification.

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are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All proc may not be available locally. For more information, contact your local ExxonMobil contact or visit www.exxonmobil.com

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